

AUTOMOTIVE COFFEE MAKER.

BACKGROUND OF THE INVENTION.

The invention relates to a DC electric cooker. Using the power 12 volt in vehicle for heating or boiling a small volume of liquid to make a cup of instant coffee; A cup of noodle soup or to reheat food ;Milk when drivers are driving or traveling .

SUMMARY OF THE INVENTION.

The primary of the invention is an integrated circuit to energize two DC heaters. Heat transfer to surface housing cooker at a preset temperature 100°C. A timer 555 controls timing and deenergizes the heaters. Driver simply puts a stainless steel cup on the surface housing cooker. Liquid in the cup will be heated up.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

Figure 1 is a view of an automotive coffee maker.

Figure 2 is a schematic of the integrated circuit.

DETAILED DESCRIPTION OF THE INVENTION.

Detailed of figure 1:

1 The surface housing cooker; 2 Two heaters; 3 Two thermal switches; 4 Rollover switch; 5 Integrated circuit PC board; 6 Main switch; 7 Cap of the cup; 8 Safety switch; 9 The stainless steel cup; 10 Small hole for to drink; 11 Small hole; 12 Handle; 13 Five side covers of the coffee maker; 14 Safety cap cover; 15 Female DC 12 volt plug.; 16 Two leds; 17 Trigger switch; 18 Timer switch;

Detailed of figure 2

Semiconductors; 1 Voltage regulator IC 78L08 ; 1 Timer IC LM555N; 1 N channel mosfet IC IRF 510;

Resistors; 2 Resistors . 0.5 k ohm; 1 Resistor 20M ohm; 1 Resistor 7 M ohm; 1 Resistor 3 M ohm; 2 Resistors 2 M ohm; 1 Resistor 10k ohm;

Leds; Two leds

Diodes; 2 diodes 1N914

Capacitors; 1 Electrolytic capacitor 100uF ; 1 Electrolytic capacitor 0.1uF; 1 Monolithic ceramic capacitor 0.01uF; 1 Tantalum capacitor 80 uF;

Switches; 1 Thermal switch 100°C ; 1 Thermal switch 200°C ; 1 Safety switch 1 Rollover switch; 1 Main switch; 1 Trigger switch. 1 SP3T switch;

Heaters ; 2 DC heaters 12 volt..1 Relay 12 volt SPST

1 Fuse 35 A

How do they work.

To start the monostable state by push trigger switch to ground to start to cook..When the charge on C3 is 2/3 V cc the timer 555 turn off two DC heaters.